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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/717,596

11/21/2003

Ayae Endo

117625

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25944 7590 04/04/2008  
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EXAMINER

GARRETT, DAWN L

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

04/04/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/717,596	<b>Applicant(s)</b> ENDO ET AL.	
	<b>Examiner</b> Dawn Garrett	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 29,38 and 41-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29,38 and 41-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 21, 2008 has been entered. Claims 1-28, 30-37, 39, and 40 are canceled. Claims 41-43 have been added. Claim 29 has been amended. Claims 29, 38, and 41-43 are pending and currently under consideration.

2. The rejection of claim 29 under 35 U.S.C. 102(b) as being anticipated by Kanai et al. (US 6,121,727) is withdrawn due to the amendment.

3. The rejection of claims 29 and 38 under 35 U.S.C. 102(b) as being anticipated by Kido et al. (US 6,396,209) is withdrawn due to the amendment.

4. The rejection of claim 38 under 35 U.S.C. 103(a) as being unpatentable over Kanai et al. (US 6,121,727) in view of Kido et al. (US 6,396,209) is withdrawn due to the amendment.

### ***Claim Objections***

5. Claim 41 is objected to because of the following informalities:

- a. It is suggested that "laminates including" be changed to "a laminate including" and "surrounded by the laminates" be changed to "surrounded by the laminate", since only two different layers are required.

- b. Also in claim 41, it is suggested "the area" be changed to "an area".

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 29, 38, and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Codama (US 6,091,196).

Codama discloses organic electroluminescent devices comprising two electrodes and a light emitting layer (see abstract). The device further comprises an electron injecting and transporting layer that is provided between the light emitting layer and the cathode (see col. 12, lines 19-42 and col. 11, lines 43-45). The electron injecting and transporting layer may be comprised of a triazole compound (see col. 12, lines 34-38). This layer reads upon the instant "metal deactivator layer...provided between the luminescent layer and the cathode" of instant claim 1. The devices further comprises a hole injection layer between the light emitting layer and the anode that does not comprise triazole or hydrazide (see col. 11, lines 25-45).

With regard to claim 38, the electroluminescent devices are disclosed for use in electronic displays and light sources (see col. 1, lines 16-19).

With regard to claim 41, Codama discloses a protective layer comprising silicon oxide may be used over the device (see col. 13, lines 1-15). With regard to the organic

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film, Codama discloses forming a sealing sheet over the protective layer comprising organic polymeric materials (see col. 13, lines 16-27). Both the protective layer and sealing sheet are considered to be in an area where the light emitting layer, electron injecting and transporting layer (metal deactivator layer), and hole injection layer are formed.

The sealing layer is considered to have an ink-repellent property per instant claim 42, because the layer is described as preventing the infiltration of moisture (see col. 13, lines 21-22).

With respect to claim 43, Codama discloses forming an electron injecting and transporting layer for the device having two or more electron injecting and transporting compounds together. One of these may include a triazole derivative. The two compounds together read upon the "organic functional material" and the "metal deactivator" of the material layer of claim 43. It is noted that claim 43 is a product by process type claim. Codama teaches all of the features required by the article of claim 43. The determination of patentability in a product-by-process claim is based on the product itself, even though the claim may be limited and defined by the process. That is, the product in such a claim is unpatentable if it is the same as or obvious from the product of the prior art, even if the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985). A product-by-process limitation adds no patentable distinction to the claim, and is unpatentable if the claimed product is the same as a product of the prior art.

Codama is silent with respect to an *example* showing triazole (metal deactivator) as the electron injecting and transporting layer; however, it would have been obvious to one of ordinary skill in the art at the time of the invention to have selected a triazole compound for the electron injecting and transporting layer with an expectation of a predictable result, because Codama clearly teaches triazoles are desirable for this layer.

### ***Response to Arguments***

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dawn Garrett/  
Primary Examiner, Art Unit 1794